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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.             | CONFIRMATION NO.       |
|--|-------------|----------------------|---------------------------------|------------------------|
| 09/888,110   | 06/22/2001  | Jagadish Bandhole    | VRT0074US                       | 7964                   |
| 60429 7590 02/07/2008<br>CAMPBELL STEPHENSON LLP<br>11401 CENTURY OAKS TERRACE<br>BLDG. H, SUITE 250<br>AUSTIN, TX 78758 |             |                      | EXAMINER<br>SHINGLES, KRISTIE D |                        |
|  |             |                      | ART UNIT<br>2141                | PAPER NUMBER           |
|  |             |                      | MAIL DATE<br>02/07/2008         | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/888,110

Applicant(s)

BANDHOLE ET AL.

Examiner

Kristie D. Shingles

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11/26/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**Response to Amendment**  
No claims have been amended.

Claims 1-24 are pending examination.

**Response to Arguments**

I. Applicant's arguments filed 11/26/2007, with respect to the rejections of claims 1-24 under 35 U.S.C. 103 have been fully considered but are not persuasive.

- A. Applicant argues that the cited combination of prior art of record, *VMware* and *Raja et al*, fail to teach multiple user interfaces or sharing a resource between multiple user interfaces.

Examiner respectfully disagrees. *VMware* clearly teaches users sharing resources between multiple interfaces of virtual machines for establishing a virtual environment by allowing multiple operating systems to run concurrently using the same hardware resources; which allows for the virtual machines to share files and devices (*page 1 paragraphs 2-4, page 4 paragraph 2, page 5 paragraphs 1-8*). Applicant's arguments are therefore unpersuasive.

- B. Applicant argues that the cited combination of prior art of record, *VMware* and *Raja et al*, fail to teach "transferring information generated by execution of the application to the second user interface in response to a command to collaborate".

Examiner respectfully disagrees. *VMware* clearly teaches allowing multiple operating system environments to run concurrently using the same hardware resources wherein virtual machines are allowed to share files (*page 1 paragraphs 2-3, Figure 1, page 4 paragraph 2, page 5 paragraphs 1, 7 and 8*), which clearly implies the transferring of information from programs running in one virtual machine environment to another virtual machine environment. Thus users of the system are capable of engaging in transactions in different virtual machines

wherein any changes implemented may be saved or erased to the virtual machine, further provisioning the transfer of information in the virtual environment (*page 6 paragraph 5*).

Applicant's arguments are therefore unpersuasive.

- C. **Applicant argues that the cited combination of prior art of record, *VMware* and *Raja et al*, fail to teach "transmitting information about the execution of a process from one computer or virtual machine to another".**

Examiner respectfully disagrees. As stated above, *VMware* clearly teaches allowing multiple operating system environments to run concurrently using the same hardware resources wherein virtual machines are allowed to share files (*page 1 paragraphs 2-3, Figure 1, page 4 paragraph 2, page 5 paragraphs 1, 7 and 8*). However, *VMware* further teaches the transferring data of an "entire computing environment" between computers (*page 2 paragraph 7*). Applicant's arguments are therefore unpersuasive and the rejection under the prior art of record is maintained.

### **Claim Rejections - 35 USC § 103**

II. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

III. **Claims 1 - 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Raja et al* (US 7,058,947) in view of *VMware* (Technical White Paper – February 1999).**

a. **Per claim 1, *Raja et al* teach a method for collaborative computing in a system the method comprising:**

- allocating a dynamic computing environment using a first user interface, wherein the dynamic computing environment comprises at least one resource of a plurality of resources, and the dynamic computing environment is allocated by virtue of allocating the at least one resource (*Abstract, col.2 lines 43-48, col.5 lines 7-19—provision for allocation of memory and applications using a user interface*);
- executing an application on the at least one resource using either the first user interface or the second user interface (*col.3 lines 18-29, col.7 lines 23-63*);
- transferring information generated by execution of the application to the first user interface (*col.11 line 19-col.12 line 18, col.13 line 64-col.14 line 66*); and
- transferring the information generated by execution of the application to the second user interface (*col.26 line 64-col.27 line 42, col.27 line 46-col.28 line 15—provision for transferring application data*).

*Raja et al* fail to explicitly teach sharing the at least one resource between the first user interface and the second user interface and transferring the information generated by execution of the application to the second user interface in response to a command to collaborate with the second user interface, wherein the first user interface and the second user interface are at least in part provided by software executing on respective first and second devices separate from the dynamic computing environment. However, *VMware* teaches users sharing resources between multiple interfaces of virtual machines for establishing a virtual environment (*VMware: page 1 paragraphs 2-4, page 4 paragraph 2, page 5 paragraphs 1-8*).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Raja et al* and *VMware* to allocate and configure resources shared between users and capable of providing interfaces for the users to interact with and manipulate the resources.

b. **Per claim 2**, *Raja et al* and *VMware* teach the method of claim 1, further comprising modifying the information in the first user interface by interacting with the at least one shared resource through the first user interface (*VMware*: page 5 paragraph 1, page 6 paragraphs 5-6).

c. **Per claim 3**, *Raja et al* and *VMware* teach the method of claim 1, further comprising modifying the information in the second user interface by interacting with the at least one shared resource through the second user interface (*VMware*: page 5 paragraphs 5 and 8, page 6 paragraph 5).

d. **Per claim 4**, *Raja et al* and *VMware* teach the method of claim 1, further comprising switching control to modify the information between the first and second user interface (*VMware*: page 5 paragraphs 5 and 8, page 6 paragraph 5-8).

**IV. Claims 5-14 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over *VMware* (Technical White Paper – February 1999) in further view of *McNally et al* (US 6,259,448).**

a. **Per claim 5**, *VMware* teaches a method for providing sharing of a software process among multiple users, the method comprising:

- allocating a distributed computing environment by virtue of allocating a first user computer and a second user computer (*page 1 paragraphs 3-4, page 2 paragraphs 5-10, page 6 paragraph 2*);
- using a resource computer to transmit information about execution of the process to the first user computer, wherein the resource computer executes the process in a first location, and a first user operates the first user computer in a second location (*page 4 paragraphs 1-6, page 5 paragraphs 7-8*); and
- using the resource computer to transmit information about the execution of the process to the second user computer, wherein a second user operates the second user computer in a third location, and the first user computer and the second user computer comprise the distributed computing environment (*page 4 paragraphs 1-6, page 5 paragraphs 7-8*).

Although *VMware* does teach the provision for users and resources existing in a virtual environment via virtual machines; *McNally et al* explicitly teaches the implementation of a distributed computing environment comprising a given set of machines providing and acting as allocateable resources wherein the distributed computing environment is deployed from a user interface (*col.2 lines 1-65*).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *VMware* with *McNally et al* for the purpose of provisioning initiating and deploying a distributed computing environment from different locations using a user interface to allocate, deallocate resources and transmit control information to the devices of the distributed computing environment. Implementing virtual environments via virtual machine resources is a well-known technique in the art used to provide users with remote access to resources and other users.

b. **Claim 18** contains limitations that are substantially similar to claims 1 and 5; and is therefore rejected under the same basis.

c. **Per claim 6**, *VMware* and *McNally et al* teach the method of claim 5, further comprising controlling the resource computer with the first user computer (*VMware: page 5 paragraphs 4-8; McNally et al: col.2 lines 30-40*).

d. **Per claim 7**, *VMware* and *McNally et al* teach the method of claim 5, the method further comprising controlling the resource computer with the second user computer (*VMware: page 5 paragraphs 4-8, page 6 paragraphs 4-7; McNally et al: col.2 lines 30-40*).

e. **Per claim 8**, *VMware* and *McNally et al* teach the method of claim 5, further teaches the method further comprising switching control of the resource computer between the first and second user computers (*VMware: page 6 paragraphs 6-7*).

f. **Claim 11** is substantially equivalent to claim 8 and is therefore rejected under the same basis.

g. **Per claim 9**, *VMware* and *McNally et al* teach the method of claim 5, further comprising modifying the information using the first user computer (*VMware: page 5 paragraphs 5 and 8, page 6 paragraph 5-8*).

h. **Per claim 10**, *VMware* and *McNally et al* teach the method of claim 5, further comprising modifying the information using the second user computer (*VMware: page 5 paragraphs 5 and 8, page 6 paragraph 5-8*).



i. **Per claim 12**, *VMware* and *McNally et al* teach the method of claim 5, further teaches wherein the shared software process is an operating system (*VMware*: page 1 paragraph 2, page 2 paragraphs 6-8, page 3 paragraph 1, page 6 paragraph 6; *McNally et al*: col.6 lines 9-11).

j. **Per claim 13**, *VMware* and *McNally et al* teach the method of claim 5, wherein the shared software process is a user interface controller (*VMware*: page 6 paragraph 8).

k. **Claim 14** is substantially similar to claim 13 and is therefore rejected under the same basis.

l. **Per claim 19**, *VMware* and *McNally et al* teach the system of claim 18, wherein the dynamic computing environment is remotely located from the second and third location (*VMware*: page 4 paragraphs 1-6, page 5 paragraphs 7-8).

m. **Claim 20** is substantially similar to claim 19 and is therefore rejected under the same basis.

n. **Claim 21** is substantially similar to claims 8 and 13 and is therefore rejected under the same basis.

**V. Claims 15-17 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over *VMware* (Technical White Paper – February 1999) in view of *McNally et al* (US 6,259,448) in further view of *Ansberry et al* (US 5,887,170).**

a. **Per claim 16**, *VMware* and *McNally et al* teach the method of claim of 5 as applied above, yet fails to explicitly teach the method wherein the system is used in technical support. However, *Ansberry et al* disclose the usability of the system extended to collaborative and non-collaborative distributed computing environments where a conferencing session may be

manipulated, thus the examples demonstrate technical support and teamwork situations which may also be implemented in training or usability studies (*col.7 line 66-col.8 line 31*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *VMware* and *McNally et al* with *Ansberry et al* for the purpose of implementing the system in training, technical support or usability studies environments since these the collaborative and cooperative nature of system would be ideal in such environments linking together users and devices across a network.

b. **Claims 15, 17 and 22-24** are substantially similar to claim 16 and are therefore rejected under the same basis.

#### Conclusion

**VI.** The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Paiz (7050813), Cheng (6396509), Da Palma et al (6874020), Bugnion et al (6075938), Bandhole et al (20020049803).

**VII. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

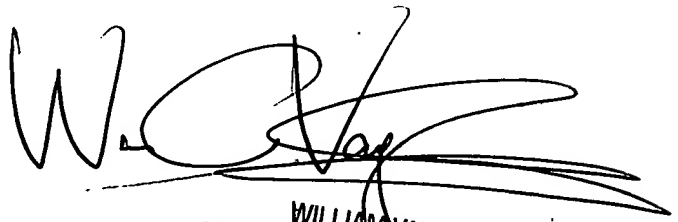
**VIII.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie D. Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Kristie D. Shingles**  
**Examiner**  
**Art Unit 2141**

*kds*



WILLIAM VAUGHN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100